ABSTRACT

A two-plane type crankshaft is provided. The weight of crank webs for the respective cylinders is divided between left and right half webs and balance ratios k_L and k_R of the half webs for the respective cylinders are set so as to be $(k_L - 0.25) \cdot (0.25 - k_R) \cong D_R / D_L$ to form a track of a vector of a primary inertial couple into a substantial circle. A primary balancer offsets the primary inertia couple.